

531,402

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number  
**WO 2004/035792 A1**

- (51) International Patent Classification<sup>7</sup>: C12N 15/31, C07K 14/245, C12N 1/21
- (21) International Application Number: PCT/GB2003/004474
- (22) International Filing Date: 15 October 2003 (15.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
0224082.8 16 October 2002 (16.10.2002) GB
- (71) Applicant (for all designated States except US): CELL-TECH R & D LIMITED [GB/GB]; 208 Bath Road, Slough, Berkshire SL1 3WE (GB).
- (72) Inventors; and  
(75) Inventors/Applicants (for US only): HUMPHREYS, David, Paul [GB/GB]; Celltech R & D Limited, 208 Bath Road, Slough, Berkshire SL1 3WE (GB). CHAPMAN, Andrew, Paul [GB/GB]; Celltech R & D Limited, 208 Bath Road, Slough, Berkshire SL1 3WE (GB). ROBINSON, Martyn, Klm [GB/GB]; Celltech R & D Limited, 208 Bath Road, Slough, Berkshire SL1 3WE (GB). SPITALI, Mariangela [GB/GB]; Celltech R & D Limited, 208 Bath Road, Slough, Berkshire SL1 3WE (GB).
- (74) Agent: THOMPSON, John; Celltech R & D Limited, 208 Bath Road, Slough, Berkshire SL1 3WE (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: E. COLI HOST CELLS WITH MODIFIED PHOS/PSTS PERIPLASMIC PHOSPHATE-BINDING PROTEINS, AND METHOD OF MANUFACTURING RECOMBINANT FABS

(57) Abstract: The present invention provides an *E. coli* host cell expressing a recombinant antibody characterized in that the *E. coli* host cell has been genetically modified in order to change at least one physical property of one or more *E. coli* proteins which in the wild type copurify with said recombinant antibody.

WO 2004/035792 A1